

CAS 108-95-2

Substance name Phenol

Toxicity

High levels of oral or inhalation exposure during pregnancy resulted in dose-dependent fetotoxicity in animals studies.^{1,2,3} The EPA oral reference dose is based on a developmental toxicity study in rats which showed decreased fetal body weight and delayed ossification of bones.⁴ Phenolic disinfectants in hospital neonatal units have caused outbreaks of hyperbilirubinemia in infants and some cases of fetal death.⁵

Exposure

Phenol was found in various children's products in testing by the Danish EPA.⁶ it was detected in a nursing pillow, a balloon, glitter glue, an infant jacket, in ABS and PVC plastics, a tent, and a coating on a wooden toy. Phenol is also listed as an ingredient in diaper rash ointment, lip products, and dandruff shampoo in an online database of personal care products.⁷

References

1. California EPA, Office of Environmental Human Health Assessment (OEHHA) Evidence on the Developmental and Reproductive Toxicity of Phenol, Draft July 2003.
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2. U.S. Department of Health and Human Services, Agency for Toxic Substances & Disease Registry. Toxicological Profile for Phenol (ATSDR 2008).
<http://www.atsdr.cdc.gov/ToxProfiles/tp.asp?id=148&tid=27>.
3. REPROTEXT Thomson Reuters (Healthcare) Inc. File for Phenol. Database Version 5.1 Greenwood Village, CO. (Accessed 2010).
4. U.S.EPA, Integrated Risk Information System (IRIS). Phenol (last revised 2002).
<http://www.epa.gov/ncea/iris/>.
5. National Institutes of Health, National Library of Medicine Hazardous Substances Data Bank file for Phenol. <http://toxnet.nlm.nih.gov/cgi-bin/sis/htmlgen?HSDB> Accessed May 2010.
6. Danish Ministry of the Environment, Environmental Protection Agency. Surveys on Chemicals in Consumer Products. Report 90, 2008. http://www.mst.dk/English/Chemicals/Consumer_Products/Surveys-on-chemicals-in-consumer-products.htm.
7. Environmental Working Group. Skin Deep Cosmetic Safety Database. Accessed online May 2010.
<http://www.cosmeticsdatabase.com/>.